

Apparatus and Method for Sending and/or Receiving Data in an SDH or, Respectively,
PDH Transmission System

Abstract

The present invention is directed to an apparatus for sending data in an
5 SDH or, respectively, PDH transmission system, comprising a means (2) for arranging
data incoming in a plurality of data channels in mini-cells (7) of flexible length and a
means (3) for generating a single data stream from the mini-cells (7), and is
characterized by a means (6) for the direct generation of transmission frames
corresponding to the SDH or, respectively, PDH transmission system from the data
10 stream. The present invention also comprises a method for sending data in an SDH
or, respectively, PDH transmission system, comprising the following steps: arranging
data incoming in a plurality of data channels in mini-cells of flexible length, generating
a single data stream from the mini-cells, and directly generating transmission frames
corresponding to the SDH or, respectively, PDH transmission system from the data
15 stream. The present invention further comprises a corresponding apparatus and a
corresponding method for receiving such data in an SDH or, respectively, PDH
transmission system. The present invention thus allows the utilization of existing
AAL2 standards and AAL2 standards yet to be defined, while avoiding the loss of
transmission bandwidth connected with the use of ATM cells.

20 Figure 1

Abstract

Apparatus and Method for Sending and Receiving Data in an SDH or PDH Transmission System

5 An apparatus and method for sending data in an SDH or PDH transmission system, including an arrangement unit for arranging data incoming in a number of data channels into mini-cells of flexible length and a multiplexer for generating a single data stream from the mini-cells. Additionally, a frame generator is included for the direct generation of transmission frames corresponding to the SDH or PDH transmission system from the data stream. The method for sending data in an SDH or PDH transmission system includes arranging data incoming in a number of data channels in mini-cells of flexible length, generating a single data stream from the mini-cells, and directly generating transmission frames corresponding to the SDH or PDH transmission system from the data stream. The present invention further includes a corresponding apparatus and method for receiving such data in an SDH or PDH transmission system. The present invention allows the utilization of existing AAL2 standards and AAL2 standards yet to be defined, while avoiding the loss of transmission bandwidth connected with the use of ATM cells.

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